## **Brigadier General Mark McDonald**Former Deputy Commanding General for Fires and

Former Deputy Commanding General for Fires and Chief of the Joint Fires Cell, MultiNational Corps, Iraq

## Fires for the 2007 Surge in Iraq: Lethal and Nonlethal



CPL William G. Jonsson, PFC Frederic J. Koons and PFC Jose Valentin (left to right), all of 3rd Battalion, 7th Infantry (3-7 IN), watch as an OH-58D Kiowa helicopter swoops low over their position in Babahani, south of Baghdad, on 10 March. Koons, a fire supporter, is providing liaison between his commander and the helicopter pilot via his radio. (Photo by SGT Ben Brody, 4th Brigade Combat Team, 3rd Infantry Division Public Affairs)



How did your Joint Fires Cell integrate and synchronize joint lethal and nonlethal fires for the corps commander in the targeting process?

Our process for integrating and synchronizing joint fires was based on how we decided to organize the cell. [See the figure for the organizational chart on Page 8.]

When we arrived in Iraq, MNC-I had a "Joint Effects Cell" to integrate and synchronize joint fires. It was a stand-alone organization for lethal and nonlethal fires. But all the planners remained in the cell; they were not integrated with the C3 Operations shop. Every week the Joint Effects Cell held an effects coordination board meeting chaired by the MNC-I commander. The board members discussed the effects they wanted for the future and how to implement them.

During our MRE [mission rehearsal exercise] before deploying, we tried to use the Joint Effects Cell organization and processes but were not comfortable that they were going to integrate joint fires.

In the "old" days, I knew that if the battalion or brigade fire supporter and maneuver commander came up with two separate plans and then later tried to integrate them into one plan and synchronize its execution, the plan did not work. The fire supporter and commander had to work together to develop one plan with the fires part of the plan supporting the commander's intent. If you develop a plan that way, it works.

So we took all the planners in the cell and put them in the three C3 Operations "horizons"—Current, Future and Plans. When any plan was developed, it was developed with the input of all the lethal and nonlethal fires planners, which went a long way toward integrating the plan and synchronizing its execution.

We operated just like we did when I was a division artillery commander [82nd Airborne Division, Operation Iraq Freedom, 2003]. All of the fire support planners worked for me, but they were in the division G3 shop helping to develop the plan. So in MNC-I, we bumped that concept up to the corps level and developed the plan the way it has worked well at the lower levels. We renamed the Joint Effects Cell the "Joint

It was my job to supervise the execution of the fires plan. I was at all the MNC-I planning meetings with General Odierno and knew his mission and commander's intent-what he wanted done.

changed because of the Surge were the tempo of and our overall approach to operations. One of our biggest challenges initially was to decide what part

of the corps would be responsible for nonlethal fires—the Joint Fires Cell or C3 Operations. Each corps commander decides which part of his organization will be responsible for what function. I think the commander should have two principal agents: one in charge of his intelligence and operations and one in charge of his lethal and nonlethal fires. This simplifies corps operations and clearly identifies who is responsible for what.

It worked for us and has historically.

We had a senior colonel who was the C3 in MNC-I, which really should be a brigadier general's job because of the broad scope of responsibilities and higher headquarters interfaces required. Our C3 was uniquely capable and did a great job, but I think each corps should have a brigadier general in charge of lethal and nonlethal fires and a brigadier general in charge of operations.

Next we need to codify this organization and process in our doctrine. The new *FM 3.0* [Field Manual 3.0 Operations] takes a step toward that, but we still have a lot of work to do.

Also, fire supporters responsible for nonlethal fires need more training in how to coordinate and synchronize civil affairs, PSYOPS [psychological operations], information operations [IO] and others. Fire supporters don't have to be able to actually conduct, say, PSYOPS, any more than they have to shoot mortars or fly close air support to coordinate and synchronize them. The experts will conduct nonlethal fires. But fire supporters must understand them better. I know the FA has added instruction on nonlethal fires in some courses—we just need to formalize that.

## Why change the name of the Joint Effects Cell to the Joint Fires Cell?

For the past 10 or so years, our leaders in the Department of Defense have been struggling with the concept of "effects-based operations" [EBO]. They knew that EBO was much more than just a military solution—EBO includes diplomatic, information, military and economic constructs, all of which have "effects." The name "Joint Effects Cell" was based on the theory that the corps conducted EBO.

It is really tough "to get your arms around" effects—the Army

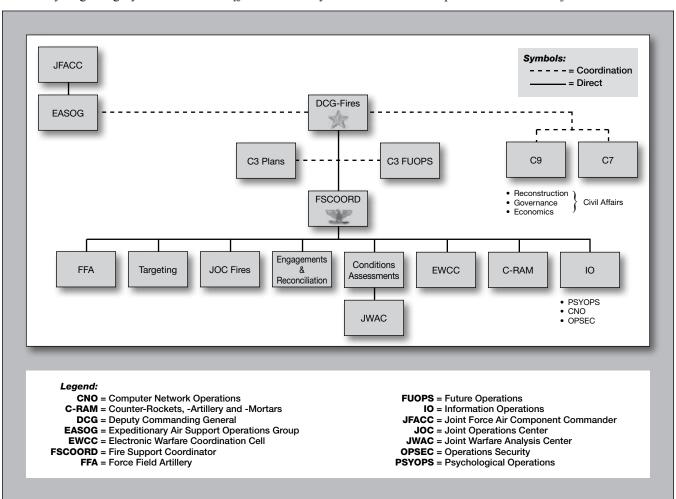
has been "all over the map" trying to define it. If you think about it, *everything* the Army does has an effect. An infantry company moving through a town has an effect. Yet in the EBO construct, the effects coordinator does not coordinate, integrate or synchronize the effect of a company moving through the town. He really integrates and synchronizes what we called in the old days "lethal and nonlethal fires."

The fire support coordinator [FSCOORD] always has been responsible for lethal and nonlethal fires—but up until the past several years, he just hasn't had many nonlethal fires to coordinate. Well, now he has a "boat load" of them.

The Army has decided not to use the term EBO, and I completely agree—hence we changed the corps cell's name to the Joint Fires Cell.

Having been in Iraq two months before the Surge began in February 2007, how did your cell operations change with the advent of the Surge?

We already had changed our organization and processes coming into theater, but what changed because of the Surge were the tempo of and our overall approach to operations. Rather than conducting "separate" operations around the country, we executed major coordinated operations, such as Operation *Fardh al Kanoon* [Iraqi for "Enforcing the Law"] to Secure Baghdad and Operations Phantom Thunder, Phoenix and Strike. We capitalized on all the objectives the divisions



The Joint Fires Cell of the MultiNational Corps, Iraq (MNC-I)



had and integrated them into corps-level operations to get simultaneous and synergistic effects.

These operations implemented the COIN [counterinsurgency operations] doctrinal three steps of "clear, control and retain." The concept is that whatever areas we cleared, we controlled and retained control of—if we took an area from al Qaeda, we never gave it back.

To do that, we needed extra forces—the Surge. Because the additional troops were not enough to implement the three COIN steps all around the country, we needed help from the Iraqi security forces. When we went into an area, we stood up a joint security station for our two forces to work together to clear, control and retain the area.

During that time, one of our bigger challenges was to conduct targeting at the operational level. Everyone is comfortable with

targeting at the battalion and brigade levels: you have specific targets, you match the assets available to the targets and execute the targets—go through the D<sup>3</sup>A [Decide, Detect, Deliver and Assess] targeting process—and it all works.

But at the corps level, you are not actually going to go out and capture or kill anything

or influence local leaders, etc. You are going to develop a broad plan for how you want those missions accomplished and then pass that plan down to the divisions for their brigades and battalions to add the details and execute it. We used the broader MDMP [military decision-making process], but at the operational level, the MDMP and D<sup>3</sup>A basically are the same. (Cells within the Joint Fires Cell, such as IO, might conduct targeting—systematically go through D<sup>3</sup>A—to identify their IO messages and then bring them into our operational plan.)

At our level, we assess the operational environment and then target against it. We target against al Qaeda, criminals, extremists, corruption in governance and other operational activities that inhibit our abilities to secure Iraq and transition power to the Iraqi government.

We need to codify operational-level targeting in our higher level doctrine. If we don't codify it, then everyone's targeting comfort zone will cause them to fall back to tactical level targeting and produce, say, "an HPTL" [high-priority target list], which is not the corps' job; it is the job of units below corps. We need to help, not hinder targeting.

US Soldiers, Iraqi police and members of *Sahawa*, a concerned local citizens group, conduct a patrol in Rusafa, Baghdad, Iraq, 26 January. The Soldiers are from the 132nd Military Police, 18th Brigade; 95th Military Police Battalion; and C Company, 1st Battalion, 504th Parachute Infantry Regiment. (Photo by SSgt Jason T. Bailey, US Air Force)

You were responsible for the MNC-I objective of standing up concerned Iraqi citizens groups during the Surge. How did you stand up those groups? What remains to be done?

About mid-spring of 2007, the planning group got together and said, "What just happened in Anbar?" In Anbar Province, the tribes started "awakening"—the tribal leaders rejected al Qaeda and decided to help the Coalition Forces and, by de facto, eventually to work with the Iraqi government.

The awakenings were pretty successful. So we tried to figure out how we could make awakenings happen throughout the country. We knew we could take advantage of our past and ongoing information and other operations that showed the Iraqi people al Qaeda is evil and would kill them at will, which is what al Qaeda was doing.

So, working with us, the Iraqi government stood up the Reconciliation Committee—actually the "Implementation and Follow-Up Committee for Reconciliation." The Joint Fires Cell worked closely with that committee, meeting every week and discussing the details of the reconciliation program.

The corps had two parts in reconciliation. First, we had to determine the process we were going to use to reconcile with Iraqis who once had fought against us and organize them into concerned citizens groups—later known as "Sons of Iraq." Our second part was to turn that process into procedures for the divisions to implement. The divisions' brigades and battalions were the units that contacted the Iraqi groups and proposed reconciliation—they made reconciliation happen.

The Sons of Iraq reconciliation program includes people who once fought against us who now are fighting with us. That is 91,000 people who help us protect the Iraqi people and give our forces intelligence information.

If you think through the reconciliation program, you realize how powerful it is. Reconciliation provides opportunities for insurgents who were fighting against the government to join the government and Iraqi security forces to fight al Qaeda and, eventually, illegal militias as well. Joining with former enemies initially made the Iraqi government nervous, even though the Sons of Iraq signed statements both rejecting al Qaeda and Iranian-influenced and sectarian extremist groups and pledging support for the Coalition and Iraqi forces and the Iraqi government.

But the program has proven to be very successful with the majority of the Sons of Iraq sincere in their willingness to help the government eliminate al Qaeda in Iraq and deal with extremists and criminal elements.

The Sons of Iraq became important to the third step in COIN: retaining control of cleared areas. We don't have enough forces to leave some behind to maintain control in all the areas we cleared. So the Coalition Forces have contracted with some Sons of Iraq to pull security in their communities. The Iraqi government approved our contracts with the Sons of Iraq, who are former enemies of the government, because we worked

the program in conjunction with the government—the Iraqi government was involved in the process.

What remains to be done? We need to transition our security contracts with the Sons of Iraq to the Iraqi government. As I was leaving in February, some contracts already had transitioned to the Iraqi Minister of Interior. Many of the Sons of Iraq actually are transitioning from the security contracts to join the Iraqi security forces.

When I left Iraq, there were 83,000 Sons of Iraq, and I just read a report that says now there are 91,000 Sons of Iraq.

To help Iraq as it becomes more secure and needs fewer Sons of Iraq pulling security, we initiated another program, one that is similar to the US Civilian Conservation Corps (CCC) in the 1930s. Our program moves these Iraqis into public works projects, providing jobs for them and additional stability to the country while helping to rebuild Iraq. The US and the Iraqi governments are jointly funding this initiative.

The Sons of Iraq reconciliation program includes people who once fought against us who now are fighting with us. That is 91,000 people who help us protect the Iraqi people and give our forces intelligence information.

The laborious targeting process we used to use has been streamlined. When our forces move into an area, they contact the Sons of Iraq and give them a list with, say, 10 al Qaeda bad guys on it; the Sons of Iraq serve as guides, telling our forces exactly where to find most of the bad guys, house-by-house.

The basis of the COIN strategy is to get the people to join you in fighting the bad guys—the reconciliation program does that.

During your tour in Iraq, the fires brigades belonged to the divisions—what are your observations about their performance? What is the role of a FSCOORD in a division with a fires brigade?

We need a fires brigade for every division in the Army—the division commanders in MNC-I all wanted them. And the fires brigade commander should be the division FSCOORD



and have a DFSCOORD [deputy FSCOORD] on the division staff. Now that is about the same organization we have had for many years—but it *works*.

The divisions in MNC-I had some level of challenge in deciding who should do what—who would be the FSCOORD: the FA colonel on the division staff designated as the "FSCOORD" or the fires brigade commander, a colonel, as the FSCOORD. We need to take that ambiguity out of the equation.

We must organize and train the way we fight. Every division should have a fires brigade, so the division commander can count on the fires brigade commander to be his FSCOORD. His FSCOORD coordinates and synchronizes all the division's fires, including nonlethal fires, working closely with G3 Operations and with fire support planners integrated into the G3 shop.

I think we need to do the analysis to see if we need a fires brigade for every corps as well. The additional headquarters' planning and execution capabilities gave our division commanders a lot of flexibility. I think corps commanders need that flexibility.

As discussed in this magazine many times, Field Artillerymen have been performing multiple standard and nonstandard missions in theater. Although such diversity demonstrates the flexibility of the FA for the Army, how do we train to perform the nonstandard missions effectively while staying proficient as Field Artillerymen for the long term?

We certainly have to train for the long-term in highintensity as well as persistent conflict and balance both of them. Right now, Field Artillerymen have performed very well in their standard missions and in a wide variety of nonstandard missions as military police, transporters, maneuver battlespace owners and others. That tells me that our leader training is working well.

But we need to include training for these nonstandard missions, so our Field Artillerymen have a "base" of knowledge from which to operate.

Some Field Artillerymen are nervous about the fact that many of our branch members have not fired a round since initial entry training [IET]. But I can tell you we fired more than 65,000 rounds in Iraq last year—timely, accurate fires—using some FA units that have been conducting nonstandard missions for five years. Many fire direction chiefs and fire support officers who fired these rounds had not fired thousands of rounds like I had when I was a captain.

There is no doubt that we need to be able to train or retrain our Field Artillerymen quickly and effectively, minimizing risks when they move from nonstandard to standard missions. To do that, we must simplify and automate cannon artillery and its training system.

MLRS [Multiple-Launch Rocket System] operations are simple and have worked well since we introduced MLRS almost 30 years ago. You don't have to check a fuze setting on MLRS. You don't have a manual backup system on MLRS or have to perform other procedures you have to perform for cannon artillery.

Today we train cannon artillerymen pretty much like I trained in the early '80s. We teach them manual gunnery procedures and

An Excalibur roars out of an M777 howitzer from A/2-11 FA on Camp Taji, northwest of Baghdad, Iraq, 26 April. (Photo by SPC Derek Miller, 2nd Stryker Brigade, 25th Infantry Division)

BG Mark McDonald listens to CSM William E. High Jr., then Command Sergeant Major of the Field Artillery, visiting Iraq from Fort Sill, Oklahoma. High now is part of the Coalition Military Assistance Transition Team in Iraq. (Photo courtesy of BG Mark McDonald)

then transition them to automated gunnery. We do that because we have been led to believe Artillerymen must know how to conduct manual gunnery to understand the theory of gunnery and be able to troubleshoot when something goes wrong.

Well, it is 2008—time is moving forward, but we have not moved gunnery training forward.

Back in the '30s, the Field Artillery transitioned from horses to trucks. Some people said, "This will never work! The trucks will break down and run out of fuel. There ain't nothing as good as the horse."

Manual gunnery is like the horse. We love it. But computers are here, and they are here to stay, just like the trucks. Everyone has a little hand-held computer that can calculate everything—we easily can add our databases to computers— TFTs [tabular firing tables] and others—and let the computers do all the work.

And young people today *learn* by using computers. We need interactive computer-based learning to teach gunnery theory (and other knowledge). Artillerymen do not need to know how to execute manual gunnery.

The pundits will say, "But they won't be able to troubleshoot when there is a gunnery problem." Troubleshooting now is based on experience. The troubleshooting process is logical and predictable. We can build computers that can troubleshoot rapidly when any of the elements of gunnery go wrong. We even can build computers that troubleshoot proactively and tell the gunner, "If you fire 'this' round, it is *not* going where you want it to." Computers need to do all that work for us.

Now we can't just stop teaching manual gunnery and only teach our present automated cannon artillery instruction—that won't work. We have to have the equipment that complements automation and the computerized training system in place for automated gunnery to work.

We must automate the cannon artillery system fully, train our Cannoneers as simply and effectively as we train our Rocketeers and then add training on nonstandard missions. Then we won't have to worry about whether or not our Field Artillerymen have the skills and knowledge to move between nonstandard and standard missions.

The horses are gone. The trucks work fine. We have to change our cannon artillery system and training.

We also need to update our training to reflect the modern battlefield. For example, we still train our young officers how to "guess a grid" in the impact zone so they then can adjust fires onto the exact location of the target—and we grade them on their abilities to do that. We ought to be training our young officers to operate and supervise the use of precision equipment—train them how to determine grids against which we can use precision munitions.

Guessing the grid is good for people who still ride horses.

How effective was the 70-kilometer Guided MLRS (GMLRS) Unitary, a precision-guided munition (PGM)? The 24-kilometer 155-mm Excalibur Unitary PGM?

Extremely effective. The accuracy of these PGMs is exactly what we need in an urban environment.



Using GMLRS, we could fire a projectile with a 200-pound warhead and take out only a portion of a house, if we needed to, or fire several projectiles and take out the entire house both options with very little collateral damage. GMLRS was the brigade commanders' weapon of choice.

We could bring these PGMs in quickly in all weather conditions. The airspace in our environment is very complex, but with our fire support automated systems, we could clear airspace for our PGMs rapidly and routinely.

PGMs are here to stay, and we need to develop more and figure out ways to use them. For example, why shoot hundreds of counterfire rounds when we can shoot one PGM and take out the piece shooting at us? We also need to improve our system to determine accurate grids.

We always should strive to improve the accuracy of all the rounds we fire, including "dumb" rounds with the addition of Precision Guidance Kits (PGKs). We should fire once and do the job, whether taking out a large enemy formation that is moving or one enemy howitzer firing at us that is stationary.

What message would you like to send US Artillerymen stationed around the world?

Your performance has been *spectacular*. You fired more than 65,000 rounds—very accurately, causing little collateral damage. You brought in 100s of tons of Air Force munitions. You performed many nonstandard missions *superbly*, including owning battlespace.

You make me *proud* to be a Field Artilleryman.

Brigadier General Mark McDonald, until recently, was the Deputy Commanding General for Fires (DCG-Fires) and Chief of the Joint Fires Cell for III Corps, deploying from Fort Hood, Texas, as part of the MultiNational Corps, Iraq. He was instrumental in planning and executing the 2007 Surge in Iraq. Currently, he is the DCG of III Corps at Fort Hood. He also was the Assistant Commandant of the Field Artillery School and DCG of Fort Sill, Oklahoma, where he had served as Chief of Staff. He commanded the 82d Airborne Division Artillery during initial combat in Operation Iraqi Freedom, the same division in which he had commanded two batteries at Fort Bragg, North Carolina; he commanded the 3rd Battalion, 321st Field Artillery, part of the 18th Field Artillery Brigade, also at Fort Bragg. He holds a Master of Military Arts and Science from the Command and General Staff College, Fort Leavenworth, Kansas.

Patrecia Slayden Hollis is an independent consultant. She was the Editor and Managing Editor previously of Field Artillery and the charter Editor of Fires, working with the two magazines for 20 years. She retired in 2007.